



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

| APPLICATION NUMBER | FILING DATE | FIRST NAMED APPLICANT | ATTORNEY DOCKET NO. |
|--------------------|-------------|-----------------------|---------------------|
| 08/838,910         | 4-11-97     |                       |                     |

EXAMINER \_\_\_\_\_

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 1744     | 29           |

DATE MAILED:

### INTERVIEW SUMMARY

All participants (applicant, applicant's representative, PTO personnel):

(1) Mr. D. Taylor (3)  
(2) Tung (4)

Date of Interview 4-19-99

Type:  Telephonic  Personal (copy is given to  applicant  applicant's representative).

Exhibit shown or demonstration conducted:  Yes  No If yes, brief description: \_\_\_\_\_

Agreement  was reached.  was not reached.

Claim(s) discussed: \_\_\_\_\_

Identification of prior art discussed: \_\_\_\_\_

Description of the general nature of what was agreed to if an agreement was reached, or any other comments: \_\_\_\_\_

*Informed attorney that 4-7-99 amendment would be entered and that an advisory action will be send shortly.*

(A fuller description, if necessary, and a copy of the amendments, if available, which the examiner agreed would render the claims allowable must be attached. Also, where no copy of the amendments which would render the claims allowable is available, a summary thereof must be attached.)

1.  It is not necessary for applicant to provide a separate record of the substance of the interview.

Unless the paragraph above has been checked to indicate to the contrary, A FORMAL WRITTEN RESPONSE TO THE LAST OFFICE ACTION IS NOT WAIVED AND MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a response to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW.

2.  Since the Examiner's interview summary above (including any attachments) reflects a complete response to each of the objections, rejections and requirements that may be present in the last Office action, and since the claims are now allowable, this completed form is considered to fulfill the response requirements of the last Office action. Applicant is not relieved from providing a separate record of the interview unless box 1 above is also checked.

Examiner Note: You must sign this form unless it is an attachment to another form.

FORM PTOL-413 (REV.1-96)

*T. TUNG*  
T. TUNG

PRIMARY PATENT EXAMINER

ART UNIT 112 (1744)

**Manual of Patent Examining Procedure, Section 713.04 Substance of Interview must Be Made of Record.**

A complete written statement as to the substance of any face-to-face or telephone interview with regard to an application must be made of record in the application, whether or not an agreement with the examiner was reached at the interview.

**§1.133 Interviews**

(b) In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for response to Office action as specified in §§ 1.111, 1.135. (35 U.S.C.132)

§ 1.2. Business to be transacted in writing. All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete a two-sheet carbon interleaf Interview Summary Form for each interview held after January 1, 1978 where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks in neat handwritten form using a ball point pen. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below.

The Interview Summary Form shall be given an appropriate paper number, placed in the right hand portion of the file, and listed on the "Contents" list on the file wrapper. The docket and serial register cards need not be updated to reflect interviews. In a personal interview, the duplicate copy of the Form is removed and given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephonic interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the telephonic interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Serial Number of the application
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (personal or telephonic)
- Name of participant(s) (applicant, attorney or agent, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the claims discussed
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). (Agreements as to allowability are tentative and do not restrict further action by the examiner to the contrary.)
- The signature of the examiner who conducted the interview
- Names of other Patent and Trademark Office personnel present.

The Form also contains a statement reminding the applicant of his responsibility to record the substance of the interview.

It is desirable that the examiner orally remind the applicant of his obligation to record the substance of the interview in each case unless both applicant and examiner agree that the examiner will record same. Where the examiner agrees to record the substance of the interview, or when it is adequately recorded on the Form or in an attachment to the Form, the examiner should check a box at the bottom of the Form informing the applicant that he need not supplement the Form by submitting a separate record of the substance of the interview.

It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview:

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed;
- 3) an identification of specific prior art discussed;
- 4) an identification of the principal proposed amendments of a substantive nature discussed; unless these are already described on the Interview Summary Form completed by the examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner. The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he feels were or might be persuasive to the examiner,
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview, unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete or accurate, the examiner will give the applicant one month from the date of the notifying letter or the remainder of any period for response, whichever is longer, to complete the response and thereby avoid abandonment of the application (37 CFR 1.135(c)).

**Examiner to Check for Accuracy**

Applicant's summary of what took place at the interview should be carefully checked to determine the accuracy of any argument or statement attributed to the examiner during the interview. If there is an inaccuracy and it bears directly on the question of patentability, it should be pointed out in the next Office letter. If the claims are allowable for other reasons of record, the examiner should send a letter setting forth his or her version of the statement attributed to him. If the record is complete and accurate, the examiner should place the indication "Interview record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

Art Unit: 1102

Claims 21-26, 31 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The supporting basis for the expressions "said internal electrode has an emissivity less than that of said high-emissivity layer" (claim 21, line 7) and "said internal electrode has an emissivity less than that of said second high-emissivity layer" (claim 31, line 9) in the original disclosure is not evident.

The specification at page 21, line 14 states that internal electrode 239 is made of Pt black, which is apparently a high-emissivity material (see original claims 12 and 13 in this regard).

Applicant seems to contend that the expressions in issue are inherently supported by the original disclosure. If so, he is requested to point out exactly where in the original disclosure such inherent basis exists for these expressions.

Claims 21-26, 36 remain rejected under 35 USC 103 over Sakurai et al in view of Torisu et al and Pollner et al.

Applicant submitted Japanese documents '946 and '251 to support his position that protective layers over internal electrodes of solid electrolyte sensors invariably have porosities less than 10%.

First of all, no translations of these documents have been submitted to enable the examiner to evaluate them fully. Consideration of these documents is based upon applicant's discussion of

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them in the April 7, 1999 response. There is insufficient time to obtain translations from the PTO translation department before action on applicant's response is due. Even if these two documents prove to have protective layers over internal electrodes of porosities less than 10%, that is not conclusive evidence that sensors of the type in question invariably have internal electrode protective layers of less than 10% porosity. All these two documents would show is that two such sensors have porosities of less than 10%. Further, it should be kept in mind that applicant's claimed range is 90% of all possible porosity values, hardly a critical narrow range.

Claims 21-26, 36 remain rejected under 35 USC 103 over Torisu et al in view of Sakurai et al, Maurer et al or Ker et al and Pollner et al.

The arguments here are similar to those of the preceding rejection and are similarly non-persuasive.

Claims 32-35, 37 remain rejected under 35 USC 103 over Ker et al in view of Agarwal et al.

Applicant's arguments in the April 7, 1999 response are somewhat vague. He appears to assert that his claim 32 calls for the heater itself to have an emissivity of 0.6 or more and that Ker does not disclose the problem of heat accumulation.

It suffices to state that the Agarwal heater, because it is made of the same conventional materials as applicant's heater, would have an emissivity of at least 0.6. It is still considered to have been obvious for Ker to adopt conventional heater materials.

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The examiner can be reached at 703-308-3329. His supervisor Robert Warden can be reached at 703-308-2920. Any inquiry of a general nature should be directed to the receptionist at 703-308-0661.



Ta Tung

Primary Examiner

Art Unit 1744